



# Decision Support in the Booming e-world

James Goodnight, CEO

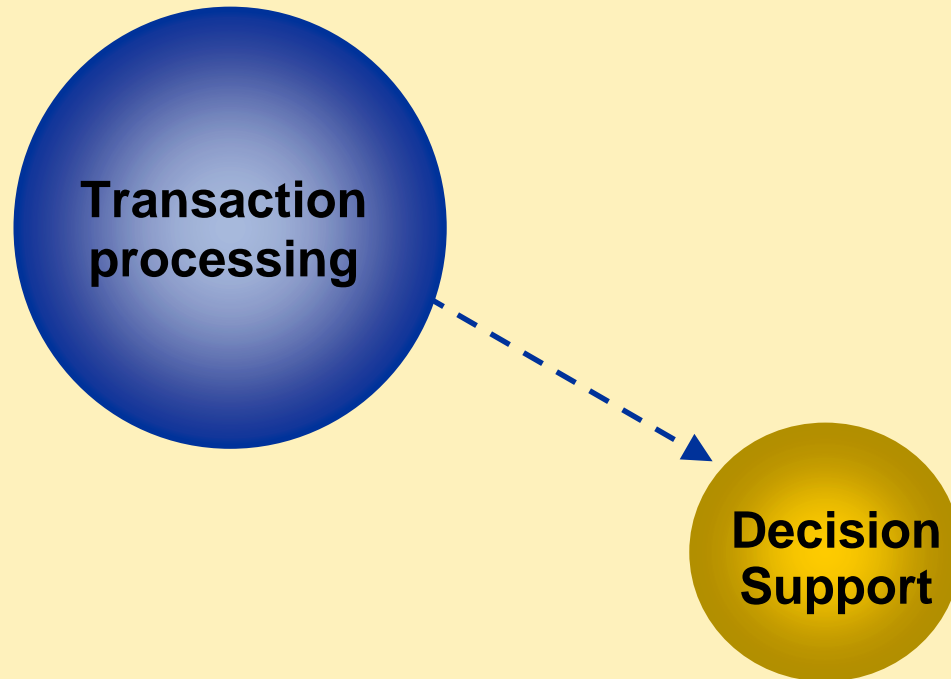
*The Power to Know™*

## Moving at Internet Speed

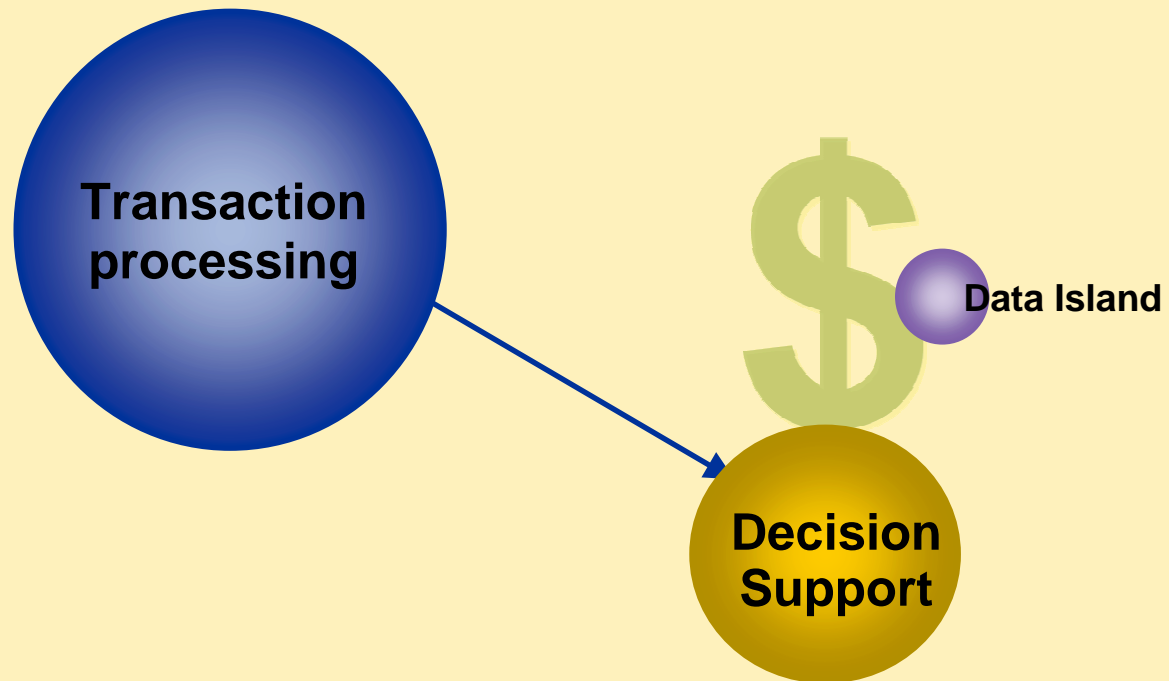
- High expectations for speed/performance
- Short time to success or failure
- High demand for technologies that bring speed and intelligence to bear in real time

*“Global e-commerce will be worth nearly \$7 trillion by the year 2004....” -Forrester Research*

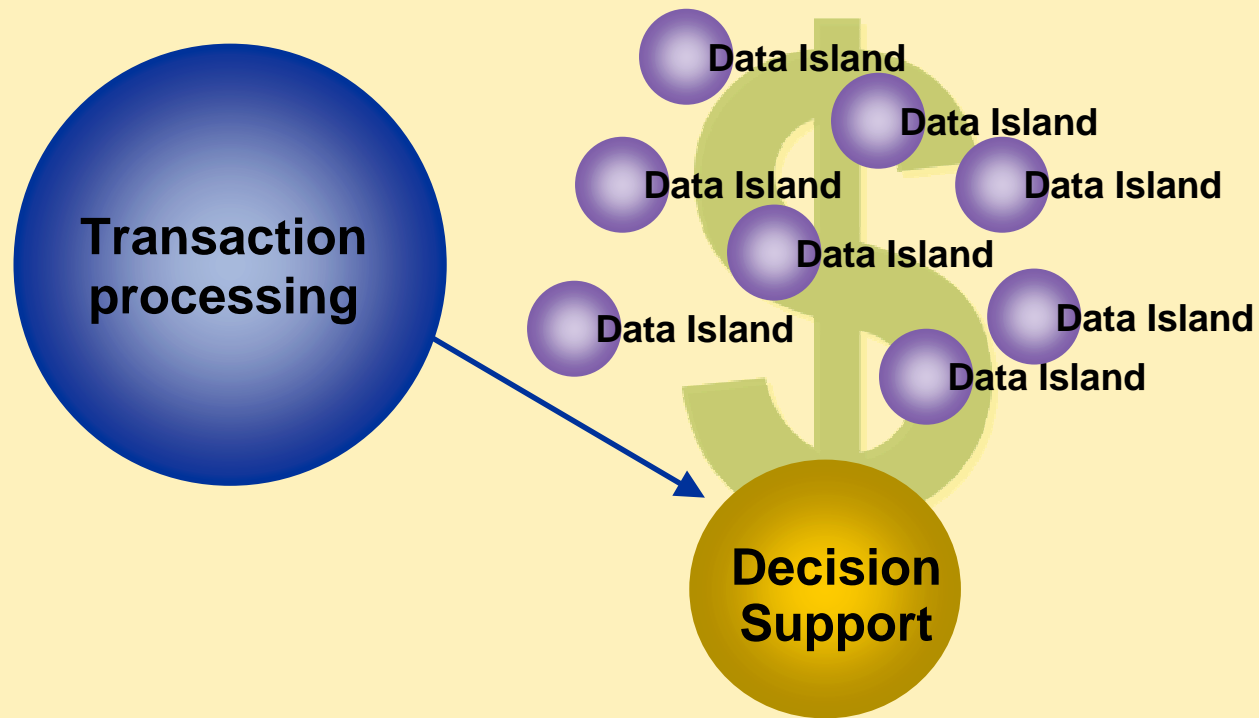
# Evolution of Decision Support



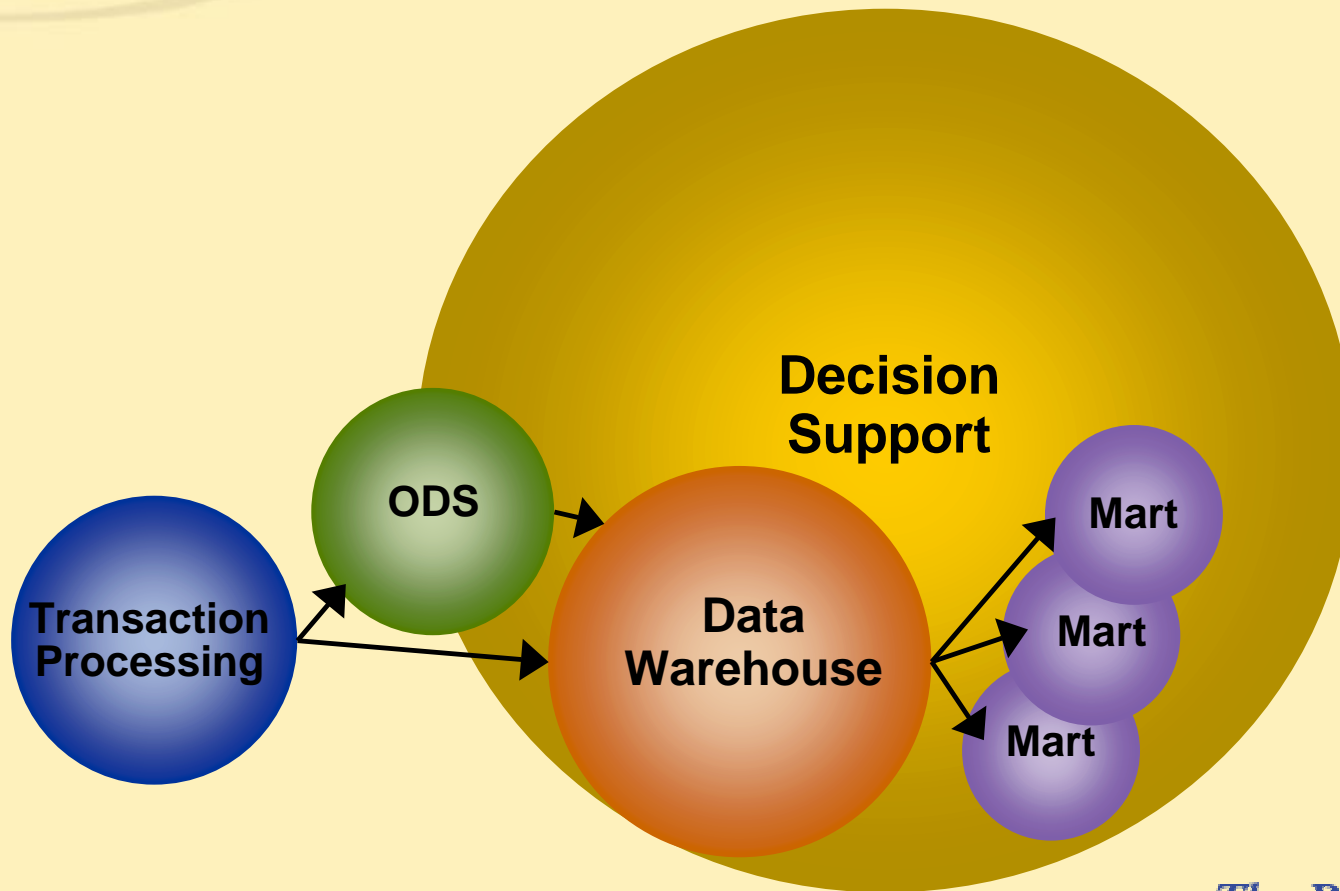
# Evolution of Decision Support



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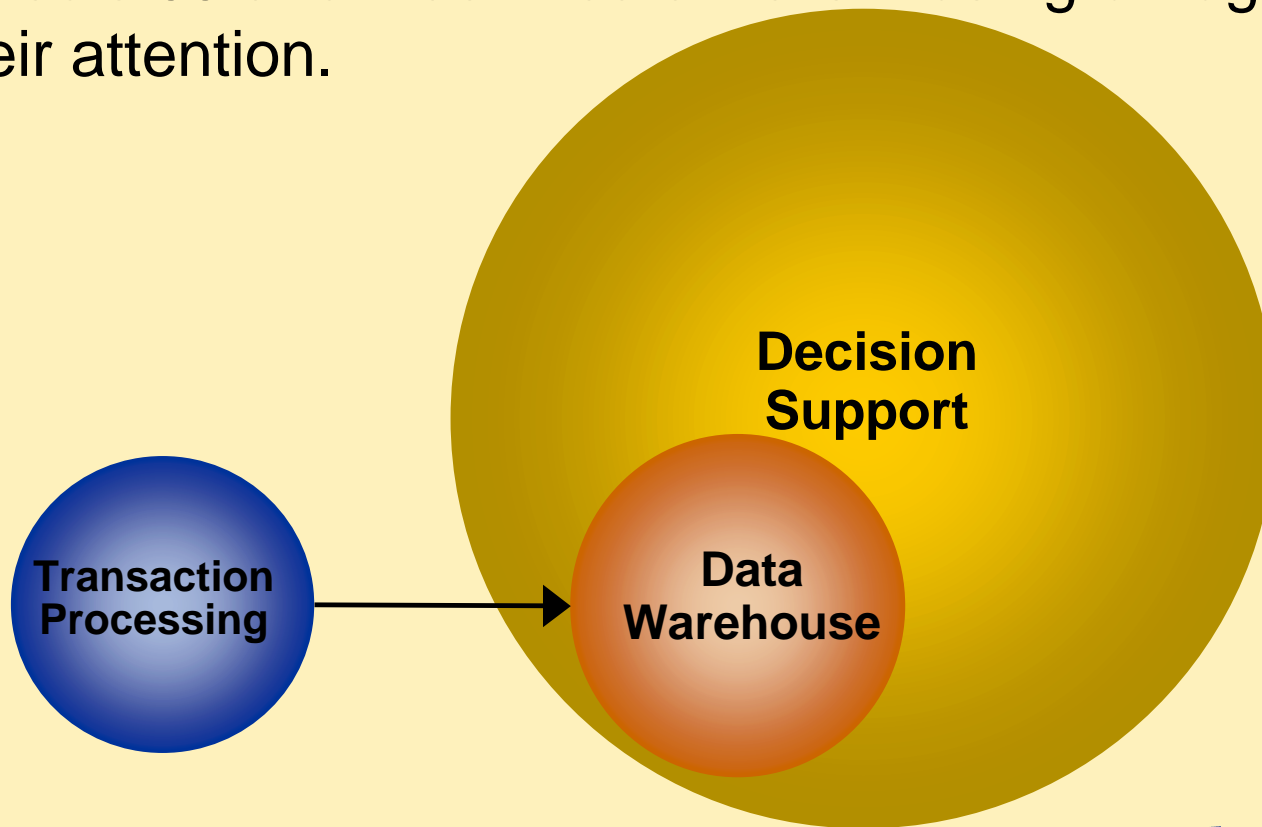


# Evolution of Decision Support

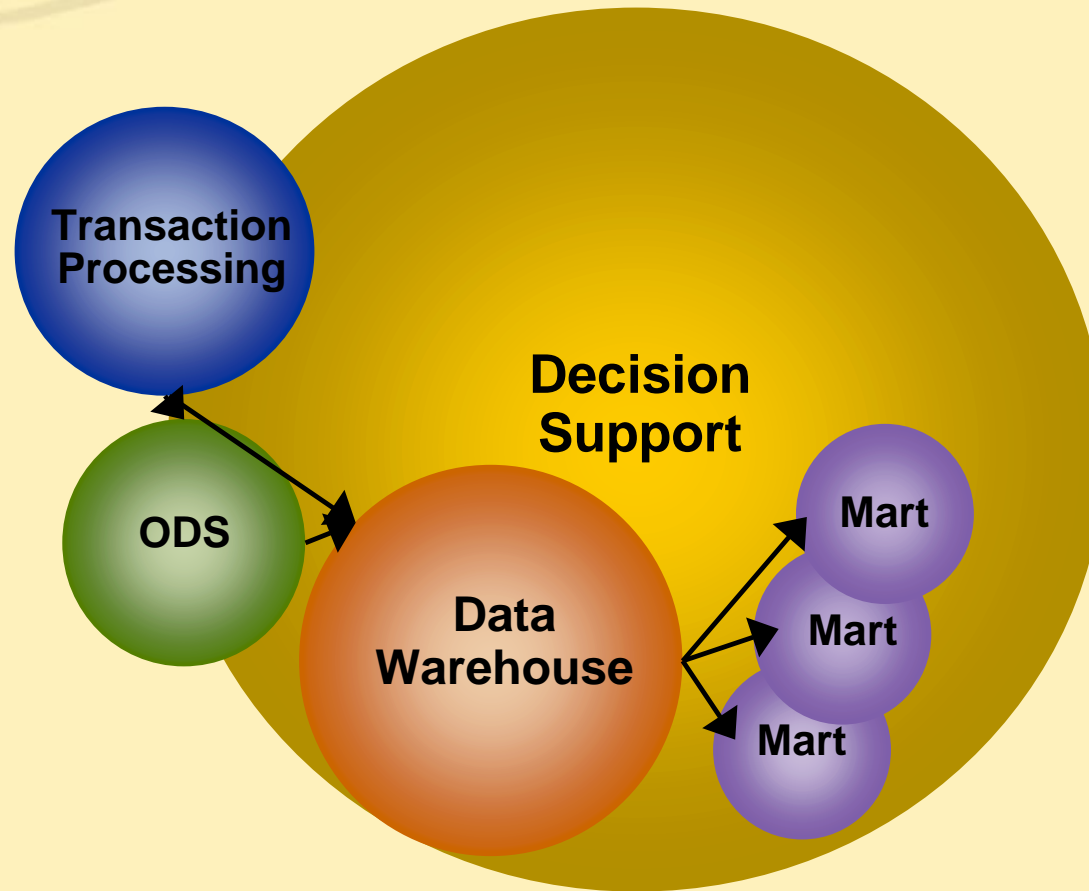


# Warehousing Success

Fidelity saved untold sums by ceasing to offer IRAs to prospects 65 and older—data warehousing brought this to their attention.

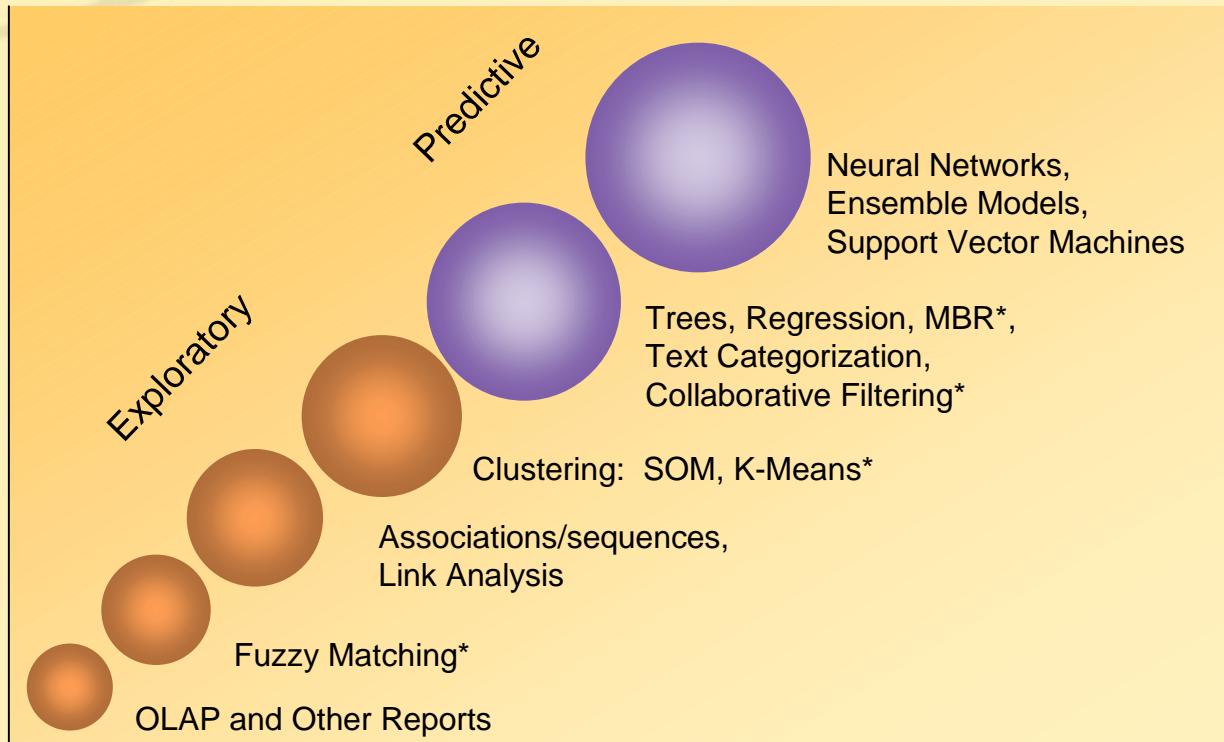


# Decision Support in the Internet Age



# Offline Functionality: More Information

**Power of  
Information**



\*Modeled in real or near-real time.

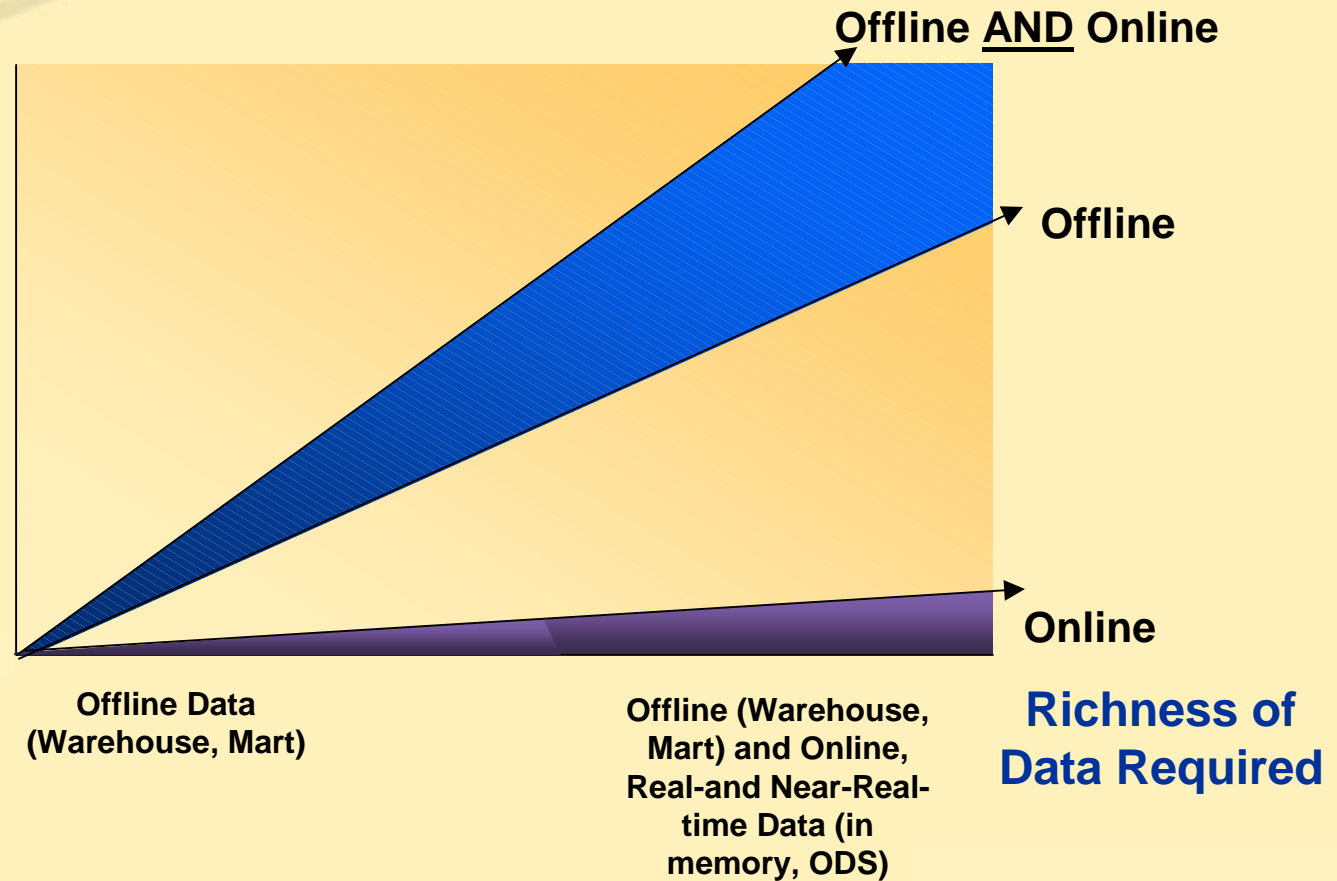
**Richness of  
Data Required**

# Leverage ALL Data

## Power of Information

Offline & Real-time exploratory & predictive mining

Offline Standard & Ad Hoc Reports, OLAP



Offline Data  
(Warehouse, Mart)

Offline (Warehouse,  
Mart) and Online,  
Real-and Near-Real-  
time Data (in  
memory, ODS)

**Richness of  
Data Required**

# Priceline.com

## Revenue Management

- Bid on airline ticket
- Sophisticated model calculates directional probabilities
- Probabilities determine profitability, bid acceptance and which page is displayed

*“The model is integral to day-to-day operations.  
The ROI is incalculable.”*



# Outpost.com

## Analytical CRM

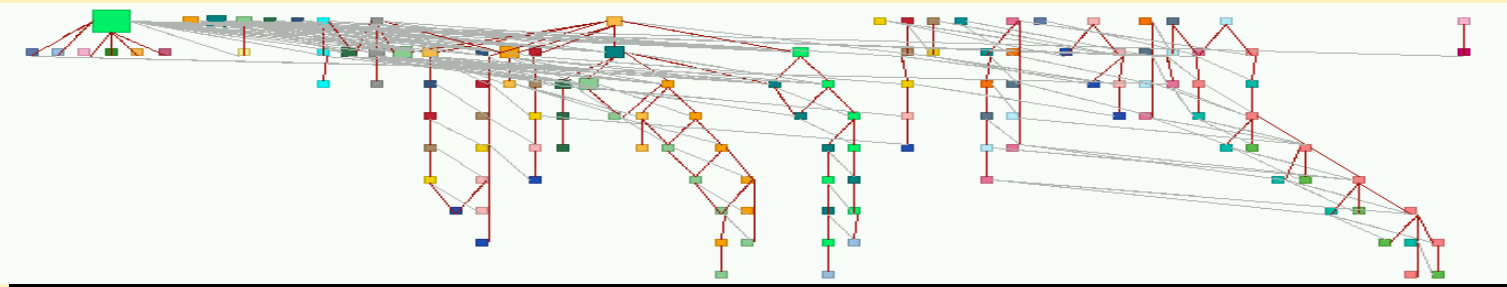
- Market Basket Analysis
- Advertising and Email Effectiveness
- Customer Profitability Analysis
- Path Analysis

*Better, faster decisions and repeatable processes.*

# Dell Online

## Analytical CRM

- Increasing conversion rates
- Path analysis for better site content & navigation
- Customer segmentation
- Improved campaign management



# Speed Is Important

- Real-time scoring
  - C-score
  - J-score
- Real-time modeling
  - A simple approach: Linear Techniques?
  - Memory-based reasoning
  - Conditionally driving models



## Speed is Important, *But Results Matter*

Leverage historical (offline) AND online data

Measure Efforts and track results

- Design of Experiments
- Optimization of Treatments

*Analytics-driven web sites please the customer  
and favorably impact the bottom line.*



## Decision Support: Future

Challenge: Adapt existing technologies to new purposes

- Plan for Success
- Measure for Greater Success
- Evolve for Continued Success



## Plan for Success

### Analytics-Driven Design

- Are you capturing the right data?
- Do you have sufficient history?
- Can you easily capture new data?
- Have you designed to track results...?

# Measure for Greater Success

## Analytics-Driven Monitoring

- Design of experiments
- Validate and track model performance
- Assess best practices
- Opportunities for new metrics



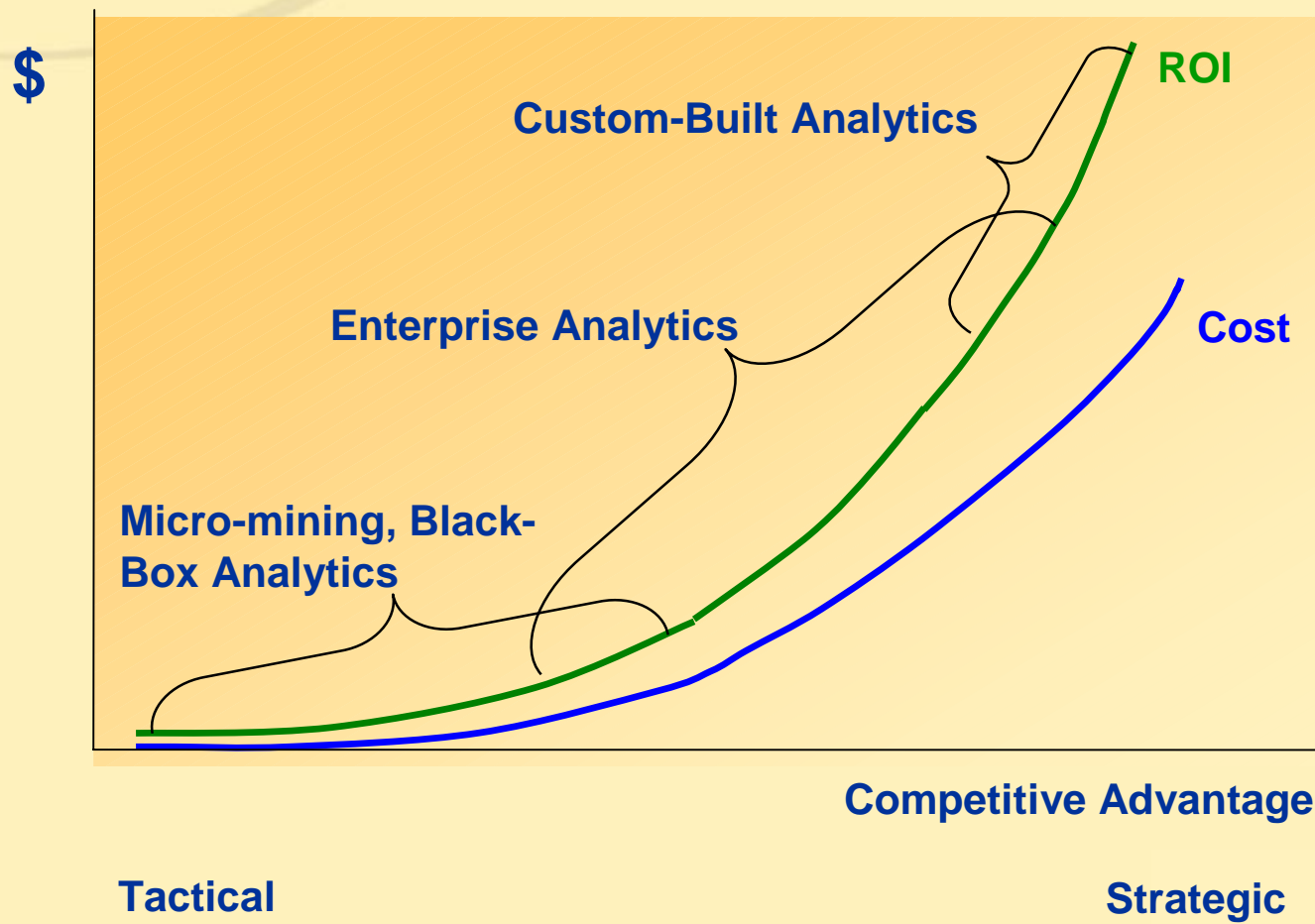
# Evolve for Continued Success

## Analytics-Driven Change

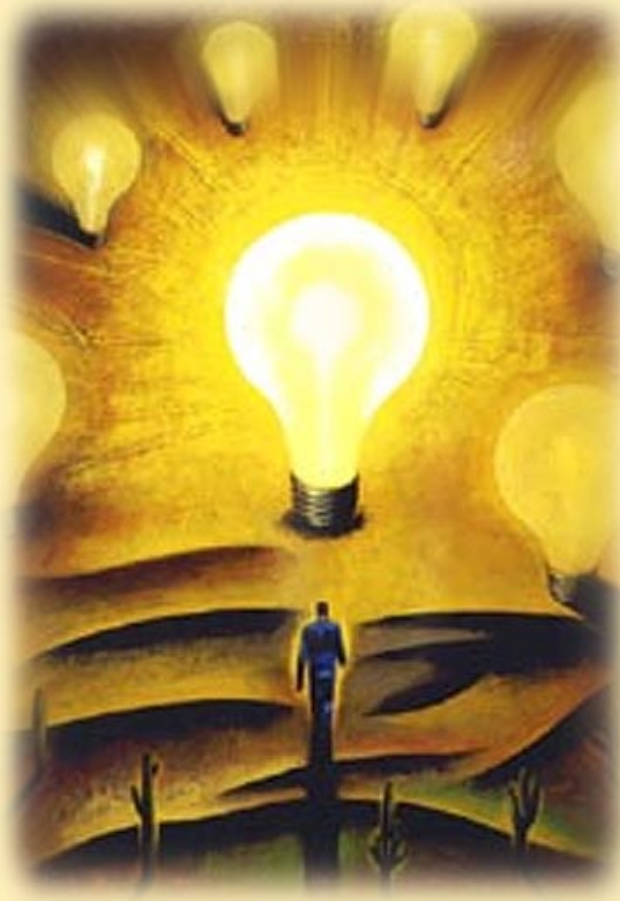
- Champion-challenger model-tracking
- Keep analytically current



# Strategic Planning



# The Bright Future



*The Power to Know.*



*The Power to Know™*

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